

**ABSTRACT**

[00104] The invention relates to a diesel engine comprising a device for controlling the flow of injected fuel with at least one fuel injector supplying a combustion chamber, controlled by a processor provided with means for controlling a series of operations of the injector of differing durations, means for measuring a minimal activation time ( $\Delta T_{MA} + \Delta T$ ) between the issuing of a command and the beginning of an injection and means for subsequently controlling the injector as a function of the measured minimal activation time. According to the invention, the engine is characterized in comprising means for determining the heat output ( $dQ$ ) brought about by the mixture of air and fuel injected into the chamber and to measure the minimum activation time using said determinations.